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ABSTRACT

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DISTRICT GUIDELINES FOR
CURRICULUM REFORM IN ELEMENTARY SCHOOLS

Danise Cantlon, Sharon Rushcamp, and
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Center for the
Learning and Teaching
of Elementary Subjects

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Center for the Learning and Teaching of Elementary Subjects

The Center for the Learning and Teaching of Elementary Subjects was awarded to Michigan State University in 1987 after a nationwide competition. Funded by the Office of Educational Research and Improvement, U.S. Department of Education, the Elementary Subjects Center is a major project housed in the Institute for Research on Teaching (IRT). The program focuses on conceptual understanding, higher order thinking, and problem solving in elementary school teaching of mathematics, science, social studies, literature, and the arts. Center researchers are identifying exemplary curriculum, instruction, and evaluation practices in the teaching of these school subjects; studying these practices to build new hypotheses about how the effectiveness of elementary schools can be improved; testing these hypotheses through school-based research; and making specific recommendations for the improvement of school policies, instructional materials, assessment procedures, and teaching practices. Research questions include, What content should be taught when teaching for conceptual understanding and higher level learning? How do teachers concentrate their teaching to use their limited resources best? and In what ways is good teaching subject matter-specific?

The work is designed to unfold in three phases, beginning with literature review and interview studies designed to elicit and synthesize the points of view of various stakeholders (representatives of the underlying academic disciplines, intellectual leaders and organizations concerned with curriculum and instruction in school subjects, classroom teachers, state- and district-level policymakers) concerning ideal curriculum, instruction, and evaluation practices in these five content areas at the elementary level. Phase II involves interview and observation methods designed to describe current practice, and in particular, best practice as observed in the classrooms of teachers believed to be outstanding. Phase II also involves analysis of curricula (both widely used curriculum series and distinctive curricula developed with special emphasis on conceptual understanding and higher order applications), as another approach to gathering information about current practices. In Phase III, test models of ideal practice will be developed based on what has been learned and synthesized from the first two phases.

The findings of Center research are published by the IRT in the Elementary Subjects Center Series. Information about the Center is included in the IRT Communication Quarterly (a newsletter for practitioners) and in lists and catalogs of IRT publications. For more information, to receive a list or catalog, or to be placed on the IRT mailing list to receive the newsletter, please write to the Editor, Institute for Research on Teaching, 252 Erickson Hall, Michigan State University, East Lansing, Michigan 48824-1034.

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Abstract

Curriculum guidelines are initiated at both state and district levels. This paper explores the interplay between curriculum policies designed at the local level and those developed at the state level by examining the policy environments in two districts each in Florida, Michigan, and California. The authors suggest that two types of interactive models define the state-district relationship: (a) district autonomy/compromise and (b) district compliance/augmentation. Districts that adopt the district autonomy/compromise model have sufficient resources and commitment to design their own independent curriculum guidelines focusing on local needs and priorities. In contrast, districts that use the compliance/augmentation model generally implement state-level policies yet sometimes go beyond these recommendations with district-devised initiatives.

THE INTERPLAY BETWEEN STATE AND DISTRICT GUIDELINES¹ FOR CURRICULUM REFORM IN ELEMENTARY SCHOOLS

Danise Cantlon, Sharon Rushcamp, and Donald Freeman²

Local school districts that elect to design their own curriculum guidelines for teachers typically do so within the shadow of state-level policy initiatives. Thus, it is important to understand how district curriculum guidelines are controlled or shaped by state policymakers. Likewise, it is also important to consider how state-level curriculum policies are altered or modified by district policymakers. This study tried to capture these perspectives by casting the central question as, "What is the interplay between intended curriculum policies designed at the district level and those developed at the state level?"

This study is part of a series of interrelated studies conducted by the Center for Learning and Teaching of Elementary Subjects. There are three limitations on the scope of the study. First, the focus is on curriculum-related initiatives that encourage elementary school teachers to teach for understanding and thinking in five content areas (mathematics, science, social studies, literature, and the arts). A second limitation is the restriction to two districts in each of only three states. If we had examined a broader range of states and districts, it is likely that other patterns would have emerged. A third and most important limitation is that we looked at the intended curriculum as portrayed in written documents over a period of one

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year rather than the actual curriculum as implemented in classrooms. The enacted curriculum is the focus of another ongoing study conducted by the center in selected California classrooms.

We identified three types of policy relationships: inverse, direct, and interactive. Some have argued that in an inverse relationship or zero-sum-game, strong state-level curriculum policies will be countered by weak district-level guidelines, and vice versa. Some analysts attribute the dramatic increases in policy activity at the state level during the 1980s to sharp drops in policy activity at the federal level (Astuto & Clark, 1986). If a comparable relation holds for the state and district levels, local policymakers will either defer to strong state policy guidelines or compensate for weak state policies by designing stronger guidelines of their own.

Others have argued that state and local interactions typically bear a direct relationship to one another such that local policy guidelines mirror those at the state level. Several authors have noted that increases in the level of policy activity at the state level have been matched by comparable increases in policy activity at the local level (Cohen, 1982; Fuhrman, Clune, & Elmore, 1988). Moreover, Freeman (1983) indicates that district objectives and tests for elementary school mathematics tend to mirror state objectives and tests.

Another position suggests that there are interactive relations between state and local policy guidelines. Based on their analyses of curriculum reform guidelines for high schools, Fuhrman and Elmore (in press) argue that interactions between state and district policy initiatives should be viewed as dynamic interplays in which local policymakers try to satisfy simultaneously both state and local goals: "Most state and federal policies in the past have engendered a range of local behavior rather than uniform compliance...the most

typical outcome is some compromise between what high level policymakers intended and local actors' needs." Furhman, Clune, and Elmore (1988) further contend that,

The importance of local context, the extent to which policies coincide with local goals and capacity, has long been appreciated by researchers. However, our findings suggest a much less passive role for districts than past implementation research posits. (p. 254)

Stated in general terms, this study is designed to determine which of the three types of relationships--inverse, direct, or interactive--is the most characteristic of observed relations between state and district policy guidelines within this area of policy activity. An important caveat to note is that the data base for this paper was limited to descriptions of intended policies and practices; it did not consider the ways in which these policies were actually enacted in local districts and schools.

Procedure

Selection of States and Districts

In accordance with a design calling for planned sampling of variations in state policy environments, we chose Florida, Michigan, and California for our analyses. According to the results of a survey of curriculum policies in all 50 states (Freeman, 1989), these three states have contrasting curriculum policies. Representing one extreme, Florida has strong policies calling for teachers to ensure that students first and foremost master basic skills. At the other extreme, California has strong policies requiring teachers to teach for understanding and thinking rather than to concentrate on basic skills. Finally, Michigan has relatively weak curriculum policies, thereby promoting high levels of district autonomy in the development of such policies (although recently, it has begun to develop policy guidelines that encourage elementary school teachers to teach for understanding and thinking).

Our design for selecting districts within states called for the identification of two districts per state, one a large urban district of 119,000-278,000 students (referred to as either FLA-Large, MI-Large, or CAL-Large) and the other a moderate-sized district of 7,500 to 25,000 students (referred to as either FLA-Med, MI-Med, or CAL-Med). The process of selecting the moderate-sized districts included (a) an analysis of socioeconomic status data for individual schools in each district to ensure that the selected districts served diverse student populations, and (b) interviews with curriculum specialists in state departments of education and presidents of state-level professional organizations in an effort to ensure that the selected districts were actively encouraging elementary school teachers to teach for understanding and thinking.

Data Base

The data base for this report was derived from two major sources (a) interviews with curriculum specialists in the three state departments of education and six local school district offices, and (b) collections of curriculum-related documents identified in these interviews. For example, in describing state curriculum guidelines in California, we drew upon our notes from nine interviews and a collection of more than 50 curriculum-related documents. The derivation of the state-level data base was interviews of curriculum specialists in each state department of education (e.g., mathematics specialist) and state education department personnel who were responsible for major areas of policy activity (e.g., director of the statewide testing program). The interview schedules featured both open-ended questions and more structured questions providing elaboration of specific features of a given initiative.

The interviews served two basic purposes: (a) providing an overview of the state's efforts to encourage elementary school teachers to teach for understanding and thinking, and (b) helping identify and collect documents depicting these policy initiatives. The process of deriving the data base for analyses of district level guidelines followed a similar plan. Interviews of curriculum and policy area specialists who played key roles in the development and/or implementation of curriculum guidelines were followed by a collection of all documents cited in each interview. Throughout the subsequent analyses, we tried to ground our inferences in published documents whenever possible rather than relying primarily on the notes from our interviews. As the final step in preparing this report, we asked those we interviewed to confirm the accuracy of our analyses for their state or district. Recommended changes were discussed and some changes were made.

Florida's Efforts to Counterbalance a Strong Press for Mastery of Basic Skills

Florida's policies and practices make a clear distinction between those efforts to ensure minimal skills are learned and those which encourage teachers to teach for understanding and thinking. The former are emphasized through the state's Minimum Student Performance Standards (Florida Department of Education, 1983; 1985; 1986) initially developed prior to 1983 (and updated every five years); the latter are communicated through the Student Performance Standards of Excellence (Florida Department of Education, 1984), developed after that time. The Minimum Student Performance Standards are hierarchically arranged objectives that students are expected to master by grades 3, 5, 8, and 11 in reading, writing, social studies, mathematics, computer literacy, and science. With the exception of science and computer literacy, they are backed by statewide assessment tests whose scores are routinely reported in the press. Grade-three promotion and high school graduation are based on

students' success in mastering these standards. For students who require extra attention in mastering the minimums, a compensatory program is provided.

In contrast to the Minimum Standards, the Student Performance Standards of Excellence "represent a broad spectrum of higher level competencies expected of those who demonstrate progress toward academic excellence in specified fields of study" (Florida Department of Education, 1984, p. 4). These standards have been established in mathematics, science, social studies, and writing in grades 3, 5, 8, and 12. Unlike the Minimum Performance Standards, these standards are not assessed by the state. Instead, districts have been mandated to implement them. This has resulted in a variety of local initiatives. In support of the Standards of Excellence, the state department (a) sponsors inservice activities for district specialists and summer institutes for teachers, (b) provides local districts with financial and technical support, (c) develops instructional guides to accompany the Standards of Excellence, and (d) offers an enrichment program called "Superstars" in mathematics. The latter is an independent program for self-selecting students, and is managed by parent volunteers under a teacher's direction.

Although both the Minimum Student Performance Standards and the Standards of Excellence are available in mathematics, writing, and science, only the Minimum Standards exist in reading and computer literacy. In contrast, social studies has been guided solely by the Standards of Excellence until the upcoming implementation of the Minimum Standards in the 1989-1990 school year.

Florida's policy initiatives to promote teaching for thinking and understanding can be characterized as add-ons to an accountability system dating back to the mid-1970s. While the Minimum Student Performance Standards are intended and assessed for all students, the Standards of Excellence are

directed toward high-achieving students, are not assessed, and are left to districts to implement with locally designed initiatives.

Overview of Curriculum Guidelines in FL-Med

The most influential teaching policies and practices in this medium-sized district of Florida include district-devised curriculum guides, assessment programs, textbook adoptions, and inservice activities. Some of these initiatives support the state's dual standards. Others overlap with or go beyond state-level initiatives, and still others provide unique initiatives in the absence of state-level directives. FL-Med designed its own curriculum guides and curriculum planning guides for teachers. The curriculum guides in mathematics, social studies, communications (reading and writing), science, computers, health, physical education, music, and the visual arts broadly describe content to be taught and identify for teachers recommended teaching strategies and activities. The curriculum planning guides provide more detail, inform teachers of lesson objectives, demonstrate how the objectives relate to the testing program, and suggest time guidelines to be used in planning.

The district's testing program includes comprehensive achievement tests developed by American Testronics, which are standardized for grades K-8 with national norms. Reading and language, mathematics, and study skills are tested each year for grades K-5, while science and social studies are tested at various grade levels. A special feature of the district testing program is the correlation of district teaching objectives to the testing program. In addition, the district has designed its own Pupil Competency Tests in language arts and math that include items similar to those typically found on the state-mandated minimum assessment. These tests are optional for teacher use and are generally administered prior to state assessments to inform teachers

of students who may require extra attention and to alert students to state-level expectations and testing format.

The textbook adoption policy encourages greater uniformity in the curriculum throughout the district. Textbooks are selected by a district committee whose policies and practices are coordinated with a state-level textbook adoption committee. State law requires that at least 50% of a district's budget for instructional materials must come from a state-approved list that address both the Minimum Standards and the Standards of Excellence.

Staff development programs sponsored by the district for elementary teachers in all subject areas also influence teachers. These programs focus on either the Minimum Standards or the Standards of Excellence. Inservice activities which attract the greatest numbers of teachers are held at local school sites and address topics chosen in response to teacher or district requests. Some inservice programs focus on higher order outcomes, can be generic or subject specific, and are usually conducted so that thinking skills are actively introduced to participating teachers.

Overview of Curriculum Guides in FL-Large

This large district in Florida also reflects the state's dual standards, both the Minimum Student Performance Standards and the Standards of Excellence, in district initiatives. Interviews with specialists confirm that the district's instructional objectives and curriculum guides, testing program, textbook adoption policy, and inservice activities all work together to influence how and what teachers teach. District objectives designed to promote a balanced curriculum for grades K-6 are available in social studies, science, language arts and reading, mathematics, health, music, physical education, and art. These include the state-required minimums as well as the Standards of Excellence.

FL-Large's district testing program includes district-developed subject area tests which focus on the district's objectives and Stanford Achievement tests in mathematics, reading, and writing for grades K-6. A specialist noted that the district has its own bank of test items for pre- and post-test purposes in all areas of the Minimum Student Performance Standards. Teachers can administer items similar to those used in the state-level minimum assessment prior to the state examination. As in FL-Med, this district heavily relies on the state-approved textbook adoption list for selection of texts. Similarly, FL-Large also awards teachers with certification points and college credit for inservice attendance. This district has made a special effort to develop an inservice program for all district teachers that focuses on the teaching of critical thinking.

Interplay Between State and Local Guidelines in Florida

The general style of interaction between state and district policies is similar in both districts; that is, district policymakers comply with state guidelines by restating the Minimum Student Performance Standards and Standards of Excellence in local initiatives. District and state initiatives often overlap; yet at times, district initiatives expand or go beyond state initiatives. An example of FL-Med's attempts to comply with state directives may be seen in its third-grade math curriculum guide, which correlates for teachers the content to be taught with (a) pupil competencies, (b) state minimum standards (SSAT), (c) the district testing program titled Comprehensive Assessment Program (CAP), and (d) the appropriate Standards of Excellence. This guide establishes clear ties to 9 of the 10 state-developed Standards of Excellence for third-grade mathematics and includes all of the state's Minimum Student Performance Standards for this subject and grade. In

this way the district accommodates the state's mandate to teach the basics and implement opportunities for higher order outcomes.

Other initiatives in FL-Med and FL-Large call teachers' attention to the state's intended curriculum. For instance, local testing programs provide district-designed minimum assessments in anticipation of the statewide examination. Each district encourages teachers to emphasize content to be covered in the state's minimum competency assessments by citing matches between district and state objectives and by providing activity booklets which address student problem areas. District textbook adoption policies also mirror state-level policies, including references to both sets of standards.

Finally, some district initiatives build on or go beyond the state's Minimum Student Performance Standards and Standards of Excellence. This is best illustrated in some of FL-Med's initiatives. For example, both Florida's Minimum Standards and Standards of Excellence address writing. This emphasis is reflected in FL-Med's implementation of "Writing to Read," a computer-based instructional system designed to develop the writing and reading skills of students in kindergarten and first grade. Other district initiatives which elaborate on the implementation of the Standards of Excellence can be seen in the inclusion of staff specialists who promote thinking skills activities and workshops, and in thinking skills publications. The specialist in this district typically sponsors generic inservices on higher order outcomes for teachers and works closely with subject-area specialists to integrate thinking skills into subject-specific inservices. This district also publishes a thinking skills continuum, built on Bloom's taxonomy, and a guidebook which lists instructional activities to accompany the continuum.

Finally, this district also has one initiative which has emerged in the absence of either Minimum Performance Standards or the Standards of

Excellence. It has developed a music curriculum guide that links stated music competencies to the district's thinking skills continuum. For example, at the second-grade level, a specific pupil competency such as "the student will demonstrate the ability to combine long and short sounds into rhythm patterns" will be followed by specific information to the teacher about pupil knowledge (name long and short sounds), comprehension (identify long and short sounds), analysis (arrange long and short sounds to new music), and synthesis (create long and short sounds with rhythm patterns).

Michigan's Emerging Emphasis on Teaching for Understanding and Thinking

Although Michigan is a local control state, state-level guidance is offered to the districts through (a) Michigan K-12 Program Standards of Quality (1987c) document, (b) Essential Goals and Objectives documents (in mathematics [Michigan Department of Education, 1988], science [Michigan State Board of Education, 1985], social studies [MSBE, 1987a], reading [MSBE, 1986], writing [MSBE, 1985b], and visual arts [MSBE, 1990]), and (c) inservice activities. However, the state-level curriculum initiatives that most influence districts are the Michigan Education Assessment Program (MEAP) tests in reading, mathematics, and science.

The Michigan K-12 Program Standards of Quality document provides an overview for school improvement. The intent is for local districts to use this document voluntarily as a guide for self-assessment of instructional programs and for the purposes of achieving a balanced curriculum and effective instruction. The Essential Goals and Objectives documents are cited in The Standards of Quality document and have recently undergone revision or are currently being revised to include an emphasis on understanding and thinking. These broadly stated guidelines provide a curricular framework for local

districts to construct a comprehensive program to meet the instructional needs of their students.

The state-sponsored inservice activities in various subject areas include the teaching of thinking and understanding. For instance, reading workshops focus on the new strategic definition of reading and the new MEAP reading tests. In addition, hands-on science workshops sponsored by the Department of Education are conducted in 13 regions across Michigan. These statewide regional workshops provide hands-on, easy-to-use instructional materials for teachers that correlate to the Essential Performance Objectives for Science Education (MSBE, 1985a) document.

The current criterion-referenced MEAP tests are administered annually at the beginning of 4th, 7th, and 10th grades in the areas of reading and mathematics. The MEAP tests in science are given in grades 5, 8, and 11. All of these MEAP tests currently focus on basic skills that most students should know and be able to do. Schools that have high concentrations of students who fall below a minimum criterion level receive compensatory education funding, which is mandated by 1970 Public Act 38. Because students' scores on the MEAP tests are published in the newspapers and are closely scrutinized by the public, the tests receive far more attention from teachers, administrators, and local policymakers than the state's other curriculum related initiatives.

At present, Michigan's intended curriculum is slowly evolving from a strong focus on basic skills to a more comprehensive and coherent framework reflecting both higher order outcomes and basic skills outcomes. The state is attempting to communicate its curriculum guidelines through an alignment of the Standards of Quality document, the Essential Goals and Objectives documents, and the new MEAP tests in reading, mathematics, and science, which assess curriculum goals. New MEAP tests that stress higher order outcomes in

reading, mathematics, and science will follow the revision of the Essential Goals and Objectives documents in these three areas. The revised MEAP tests in reading, mathematics, and science are scheduled for implementation during the Fall of 1989, 1991, and 1992, respectively.

Overall, the MEAP tests will focus on cognitive processes rather than on memorized basic skills. For instance, the new MEAP reading tests are based on objectives which view reading as a dynamic and interactive process: "The new reading objectives are designed to describe the characteristics of a good reader as outlined by reading research" (Michigan State Board of Education, 1987b, p. 4). There are three categories of new objectives: constructing meaning, knowledge about reading, and attitudes and self-perceptions. Thus, new test items measure students' abilities to construct meaning for selected texts, and measure students' knowledge about and attitudes toward reading these texts. In addition, there are topic familiarity items to measure the role of students' background knowledge in their reading comprehension. The topic familiarity items are given prior to the administration of the reading passages.

Moreover, the State Department of Education plans to introduce writing tests in 1991. These tests will stress the process writing approach. In addition, the new MEAP math tests, based on the revised goals and objectives statements, will focus on six process strands (e.g., conceptualization, problem solving) and eight content strands (e.g., numeration, geometry). These tests may include open-ended items, performance assessments, and the use of calculators, as well as multiple-choice items. Lastly, the upcoming MEAP science tests may also include short-answer essays and performance tasks, as well as multiple-choice items, to assess student understanding.

Overview of Curriculum Guidelines in MI-Med

Curriculum guidelines in the medium-sized district of Michigan press teachers to ensure that students have mastered basic skills. Until recently this press was closely attuned to the state's intended curriculum. Simply stated, this district follows the state's lead in its design of most curriculum guidelines. The policies and practices which most influence the ways in which teachers teach in this district include (a) district curriculum guides, (b) a district testing program, (c) district-wide textbook adoptions, (d) district-sponsored inservice activities, and (e) time recommendations.

Although MI-Med has developed its own curriculum guides in mathematics, science, social studies, reading, music, and art, most of these guides correspond closely to the state's current Essential Goals and Objectives. For instance, The Mathematics Curriculum Guide (Grade 4) lists grade-level objectives, pages in the district-wide adopted textbook, critical objectives, and MEAP-related objectives for each chapter overview. Of 70 grade level objectives, 59 are MEAP-related. In addition, the grade-level objectives in The Elementary Science Guide (Grade 6) match the science process objectives in the Essential Performance Objectives for Science Education verbatim. Two of the "inferring" objectives read as follows:

- 1) Identify an inference based on an observation.
- 2) Identify an inference which utilizes a property of an object discernible by any combination of senses. (Michigan State Board of Education, 1985a, p. 32)

A district testing program has also been implemented that focuses on the district's objectives. Given the close links to the state guidelines, only about 20% of the test items currently focus on student understanding and thinking. Textbooks are chosen by a committee that selects one series to be used district wide. Even though a text's consideration of higher order

outcomes is becoming a more important criterion with each new textbook series selected, it is still not of primary importance.

Inservices are sponsored by the district for elementary school teachers in mathematics, social studies, science, reading, music, and art. To stay informed about the upcoming changes in the science portion of the MEAP, some teachers in MI-Med attended a three-day state-sponsored workshop. Although there is some emphasis on higher order outcomes, the majority of the inservices do not focus on thinking and understanding. Finally, the district also followed the lead of the state in its recommendations regarding the amount of time elementary school teachers should spend on each subject. However, there is no recommendation on the amount of time devoted to student thinking and understanding.

MI-Med has augmented the state's intended curriculum in the area of fine arts. Examples of MI-Med moving beyond the state curriculum guidelines include the implementation of the Disciplined-Based Art Education method, museum tours, and studio experience for the elementary students. Five out of eight elementary schools (upper grades) have a gallery program in which students participate in visual arts exhibitions. This district has also been working on implementing a comprehensive plan to integrate art with other content areas. In addition, the district's curriculum guide in art encourages teachers to teach for thinking and understanding by having the students express ideas about art, appreciate art, and evaluate art.

Overview of Curriculum Guidelines in MI-Large

MI-Large's guidelines call for a more balanced curriculum and encourage teachers to teach for thinking and understanding as well as basic skills. In fact, MI-Large led the state in the movement toward higher order outcomes. The district guidelines are backed by consistent support from the deputy

superintendent and are advanced across three different policy fronts: curriculum guides, district-level textbook adoptions, and inservice activities. Until recently, these guidelines were also communicated through a district criterion-referenced testing program that focused on the goals and objectives cited in the curriculum guides. However, the district has dropped the testing program due to financial constraints.

The district curriculum guides include strands and objectives focusing on understanding and thinking in social studies, music, art, language arts/English, health, computer technology, math, and science. MI-Large's strands and objectives integrate basic skills with higher order outcomes. Likewise, a central criterion in the selection of district-wide texts for the past three years has been the text's treatment of higher order thinking. Finally, many district-level inservices are given which emphasize teaching for thinking and understanding. Some examples include (a) reading workshops on how to teach compatibly with the state's new definition of reading, (b) math workshops on using manipulatives and other topics which encourage teachers to teach for conceptual understanding, and (c) inservices on the cognitive processes (e.g., analyzing, evaluating, problem solving, decision making, and inquiry) discussed in Dimensions of Thinking: A Framework for Curriculum and Instruction (Marzano et al., 1988), a book coauthored by the deputy superintendent. As noted earlier, the district also had a criterion-referenced testing program that aligns with the other initiatives.

Interplay Between State and District Guidelines in Michigan

Curriculum guidelines in MI-Med have a strong orientation toward basic skills and until recently were closely aligned to the state's intended curriculum. But when the state shifted from a skill-centered curriculum in the area of reading to an approach that promotes strategic reading, the

district's guidelines were no longer parallel to the state's intended curriculum. This dissonance created a press for the district to include higher order outcomes in the reading curriculum in order to align with the state and resolve the tension.

The current reading curriculum of MI-Med is based on the state's new definition of reading. For example, MI-Med's Curriculum Guide in Reading was revised in 1988, after three years of study, to parallel the state's Essential Goals and Objectives for Reading Instruction. Moreover, a new district test modeled after the new MEAP reading tests will be implemented in 1989 and given to students in grades three through six. Even though this district's reading test is similar in format to the new MEAP reading tests because they both assess the process of reading, it does not duplicate the state test. Inservices and staff development programs emphasize the teaching of reading as a strategy. Finally, because the state is planning to assess the process approach to writing, the district is also planning to implement writing as part of its assessment program.

Since the new MEAP mathematics tests will not be in place until 1991 and the current MEAP mathematics tests measure basic skills, MI-Med continues to assess basic skills in mathematics. The district has its own criterion-referenced tests which correlate with the district's objectives and also include MEAP-related objectives. Similarly, since the new MEAP science tests will not be in use until 1992, the district's elementary science program continues to emphasize the development of basic science skills. MEAP objectives related to the science processes are included in the district's science curriculum guides. Although there is still a greater emphasis on basic skills in math and science, the press for thinking and understanding will likely increase as the new MEAP tests are implemented.

The interplay between state and district guidelines in MI-Large is different from that in MI-Med. This is mainly because MI-Large preceded the state in emphasizing teaching for thinking and understanding. According to the deputy superintendent, the state's Essential Goals and Objectives documents did not play a prominent role in the development of the district's curriculum strands and objectives. In his view, the district had sound, up-to-date tests and curriculum objectives prior to the state's move toward a more balanced curriculum. The lack of dependence on state's guidelines is further evidenced by the fact that the district has elected to adopt a single textbook series. In contrast, the state does not have a textbook adoption policy. Another in which MI-Large's emphasis on teaching for thinking and understanding is distinct from the state's is that many of the district-level inservices and workshops focus on programs designed to teach generic thinking skills, as well as to teach for thinking and understanding in specific subject areas. For example, workshops in math and science sometimes focus on the model lessons in the K-3 curriculum guides, which include higher order outcomes. These model lessons are designed to provide teachers with an idea of how to design lessons. They include thinking skills and give examples of how to teach thinking in more concrete ways. Finally, MI-Large has a policy calling for periodic reviews of the curriculum in specific subject areas, whereas the state does not.

Nevertheless, since the state's primary source of influence on districts is through the MEAP tests, it is likely that policymakers in MI-Large will make a deliberate effort to modify their curriculum guidelines to accommodate the upcoming changes in the MEAP tests. For instance, the district has already sponsored inservices focusing on the state's new definition of reading. According to one of the curriculum specialists, attention to student

thinking and understanding has increased in the area of reading due to the upcoming MEAP reading tests. In other words, the fact that the state's emphasis on teaching for understanding and thinking will probably differ from that of the district is likely to create at least some minor dissonance between state and local guidelines that district policymakers will seek to resolve.

California's Strong Press for Curriculum Reform

According to our recent survey of policy guidelines in all 50 states (Freeman, 1989), California's efforts to persuade teachers to teach for understanding and thinking are more comprehensive than those in any other state. These efforts are advanced across six different policy fronts: curriculum frameworks, K-8 curriculum guides, handbooks, statewide tests, state-level textbook adoptions, and inservice activities. Curriculum frameworks cover seven different subject areas: mathematics, science, health, English/language arts, history/social science, foreign languages, and the visual and performing arts, and serve as the cornerstone of policy design. All of the other initiatives are directly tied to ways that the intended curriculum is described in these documents. Framework portrayals of the intended curriculum include narrative descriptions of what should be taught in a given subject area, how the subject should be taught, and to a lesser extent, how student achievement in that area should be assessed. Without exception, recent frameworks press teachers to move away from a skill-centered curriculum and toward a curriculum that promotes student understanding and thinking.

Two sets of documents elaborate on the framework's philosophical descriptions. Model curriculum guides for kindergarten through Grade 8 translate the frameworks into guidelines for elementary and middle school

teachers. This set of documents provides a general sense of desired classroom practice, including specific examples of the kinds of lessons teachers can use to engage pupils in higher order thinking in each subject area. Handbooks provide checklists that local curriculum planners can use as guides in assessing the quality of the instructional programs they provide in each subject.

Textbook adoptions and statewide tests lend authority to the other initiatives. California is the only state that has aggressively negotiated with textbook publishers to develop books or other instructional materials that support the state's call for curriculum reform (i.e., that align with the new frameworks) [see Freeman, 1989]. Likewise, California is one of a small number of states that is actively revising its statewide testing program to support the reform movement. For instance, third and sixth grade tests will be introduced in 1991 that will (a) align with the new frameworks and (b) include performance tests as well as paper-and-pencil tests in four different subject areas. Finally, California sponsors a number of professional development activities that train teachers and administrators to serve as leaders in implementing the curriculum frameworks in their local districts. Among the many assumptions and features that characterize California's curriculum reform initiatives, five are likely to stand out as particularly salient in the state's curriculum guidelines:

1. The state's emphasis on teaching for thinking and understanding is not compromised by a countervailing emphasis on mastery of basic skills. Nor is it compromised by the assumption that basic skills must be mastered as a precondition for working on higher order outcomes.
2. The press for understanding and thinking is directed toward all students (not just the higher achievers).
3. The design and implementation of curriculum initiatives is guided by a seven-year cycle plan in which one subject area serves as the focus of concern each year. Districts that voluntarily comply with this plan will review their instructional programs in a given subject area

during the two-year period following the release of the framework for that area. These reviews will culminate with district adoptions of textbooks from the state approved list.

4. Recent curriculum frameworks describe desired learner outcomes in narrative terms and not as discrete goals and objectives. This action is grounded in the assumption that discrete lists of goals and objectives move teachers away from, rather than toward holistic and integrated approaches to instruction that emphasize higher order outcomes.
5. The state's curriculum initiatives are guidelines, not mandates for local districts. However, most of these initiatives are backed by legislative statutes (i.e., legal authority).

An Overview of Curriculum Guidelines in CA-Med

Curriculum guidelines in this medium-sized district are advanced across four policy fronts: (a) instructional objectives in four different subject areas (mathematics, science, English/language arts, and history/social science), (b) a district testing program, (c) district-wide adoptions of instructional materials, and (d) inservice activities. Two different types of objectives for each grade (K-6) and subject are listed in the K-12 curriculum manual distributed to each teacher: (a) "essential grade level skills" that portray grade level expectations for all students and (b) "extension of skills" that describe activities for more able students. The process of revising objectives in each of the four subject areas parallels the state's seven-year cycle plan. During the three-year period following the release of a new framework, the district (a) conducts a self assessment in the subject area represented by the framework (using lists of "elementary quality criteria" provided by the State Department of Education as guides), (b) develops, pilot tests, and implements an updated list of district objectives (using the state's curriculum frameworks, model curriculum standards, and K-8 curriculum guides as resources), and (c) selects instructional materials for

all schools in the district (from the list of materials approved by the state).

The district testing program includes the Comprehensive Test of Basic Skills (CTBS), a standardized achievement test in grades 1 through 8, and tests of basic competencies in reading, writing, and mathematics administered in grades 5 and 9. The latter tests are designed by the district and focus squarely on the lists of essential skills. The tests are a product of an earlier state-level accountability initiative calling for districts to develop a system for demonstrating that a given student has mastered essential skills as a precondition for receiving a high school diploma. To assist teachers in identifying areas of program weakness, diagnostic profiles of student performance are prepared annually for each school across all three tests, CAP, CTBS, and basic competency tests.

The district also has a carefully designed procedure for selecting the instructional materials used district-wide. According to the district's curriculum manual, adopted materials must "foster critical thinking." The recent adoption of a mathematics text illustrates the selection process. First, members of the district's mathematics committee underwent a year of training (some of which focused on the state framework and curriculum guide) as a precondition for updating the district's mathematics objectives. The objectives then served as criteria for selecting a textbook series from the list of six mathematics series approved by the state. The series ultimately selected was generally recognized as the one that most closely aligned with the state's curriculum framework.

During the year this textbook series was first introduced, almost all the district's inservice activities centered on helping teachers to use the new books successfully. During the preceding year, all teachers were required to

participate in a workshop focusing on methods for teaching problem solving. In addition to workshops centering on textbook use, the district's professional development program features a variety of optional activities listed in a Professional Development Catalog. Each of these activities centers on teaching critical thinking, either within specific subject areas or as a generic skill. The offerings for a given year typically focus on the subject area in which textbooks are about to be selected or on one of the district's own goals (e.g., writing across the curriculum).

An Overview of Curriculum Guidelines in CA-Large

Approximately 25 of the more than 100 schools in the CA-Large district participate in a special program for racially isolated schools. The Basic Skills Mastery Program (BSMP)² began in 1980 in response to a court order to improve students' scores on Comprehensive Tests of Basic Skills (CTBS). Centering on basic skills in reading, mathematics, and language arts, BSMP programs are highly structured, focus on stated objectives, and feature a mastery learning model that is backed by district-designed tests and a centralized recordkeeping system. BSMP teachers are supported by extensive inservice activities, a resource teacher in each school, and an abundance of instructional materials.

The district's curriculum guidelines are conditioned, in part, by the perceived needs of BSMP schools and are communicated through four policy initiatives: (a) teacher's guides in mathematics, science, social studies, literature, and the arts, (b) district-wide textbook adoptions, (c) district-sponsored inservice activities, and (d) a district testing program. The teachers' guides supplement and shape teachers' use of the textbook and other

²Basic Skills Mastery Program is a pseudonym.

instructional materials in each subject area. For example, in mathematics the teachers' guide mandates that all chapters in the newly adopted textbook series will be covered by the end of the school year. Whereas the instructional objectives presented in the guide are taken verbatim from the textbook, the district has added its own homework assignments and chapter tests. The chapter tests emphasize higher order outcomes to a greater extent than those in the book. Alternative forms of these tests also support teachers' use of the mastery model. As a supplement to the guide, teachers in BSMP schools receive an auxiliary support package that includes extra worksheets and homework assignments as well as scripted lesson plans for troublesome lessons.

The district-wide selection of instructional materials is the only clear link between state and district curriculum guidelines in CA-Large. Stated in simplest terms, the state approves only those materials that align with its curriculum frameworks. The district then takes steps to encourage teachers to follow these materials closely. The textbook selection process in CA-Large is guided by a detailed master plan and conforms to a modified version of the state's seven-year cycle plan (with the introduction of new textbooks in the four major content areas typically spaced at two year intervals).

The district also sponsors inservice activities to support teachers' use of state-approved instructional materials. For instance, during the year preceding the introduction of the new mathematics textbooks, four teachers from each school participated in three-day workshops focusing on the new texts. All elementary school principals also participated in a one-day workshop centering on textbook implementation. Those who were trained then taught other teachers in their buildings how to use the new books for the next year. At that time, the district also offered inservices focusing primarily

on methodological problems associated with teachers' use of the new books (e.g., use of manipulatives). In recent years, some of the district's inservice programs have also focused directly on the infusion of thinking skills into the curriculum.

The district's testing program includes district-designed, curriculum-embedded tests presented in the teachers' guides (described earlier), and CTBS achievement tests administered in grades 5, 7, 9, and 11. The curriculum-embedded tests align with content covered in the book and play an important role in implementing the mastery model of instruction; the CTBS tests are only moderately aligned with the textbooks' content and are used primarily to identify program strengths and shortcomings. Because both of these tests continue to play a more prominent role in BSMP schools than in the regular schools (CTBS scores must still be reported to the court), BSMP teachers are likely to be more test conscious than their colleagues in other schools.

Interplay Between State and District Guidelines in California

The interplay between state and district curriculum guidelines is relatively straightforward in CA-Large. Here, policymakers reason that if the state approves only those instructional materials that align with the state's curriculum frameworks, then the district's efforts to encourage teachers to use these materials should move schools toward the state's intended curriculum. In that sense, the teachers' guides, textbook adoptions, and inservice programs all press teachers to implement the state's curriculum guidelines. In mathematics, these guidelines also move BSMP and non-BSMP schools toward a more common instructional program. Yet, these initiatives do not disrupt the integrity of the district's instructional management system in either category of schools. This system focuses primarily on mastery of basic skills and is in many ways at odds with teaching for understanding and

thinking as depicted in the state's curriculum framework, particularly in BSMP schools. In other words, the district's curriculum guidelines in mathematics represent a straightforward compromise between state and district goals.

The interplay between state and district guidelines in CA-Med is more complex than in CA-Large. In this setting, the district's curriculum guidelines reflect policymakers' resolution of the tension between the state's recent call for curriculum reform, on the one hand, and the district's perceived need to ensure that all high school graduates can demonstrate mastery of basic skills as outlined in earlier state initiatives on the other. As noted earlier, recent state-level curriculum guidelines were considered throughout the design of the district's curriculum. In two policy arenas these guidelines prevailed: the adoption of a new mathematics series that closely aligns with the state's curriculum framework, and the provision of inservice activities that augment teachers' use of this series. If teachers look to the new textbooks for guidance in deciding "what" and "how" to teach (which was the common impression among those we interviewed), these district initiatives should move CA-Med's teachers even closer to the state's intended curriculum.

However, in the other two policy arenas--objectives and tests--the state's call to teach for understanding and thinking in mathematics was counterbalanced by the district's specification of essential skills for high school graduation requirements. Although the clear intent of recent efforts to update the district's mathematics objectives was to revise these statements to more closely align with the state framework and K-8 curriculum guide, these efforts fall short of the mark. For example, two of the district's sixth-grade mathematics objectives read as follows:

1. Add, subtract, multiply, or divide fractions or mixed numerals.
2. Use ratios to compare two quantities, find a ratio equal to a given ratio.

The parallel objectives in the state's mathematics framework read:

1. Understand the concept of fractions and their order and, on the basis of this understanding, find their sums, differences, and products.
 2. Understand and use ratio and proportion to solve problems.
- (California State Department of Education, 1985, p. 27)

As these examples suggest, the district's objectives fail to capture the full thrust of the state's call for a meaning-based, rather than a skills-based, mathematics curriculum. This mismatch is further reinforced by the decision to list district objectives in two columns: objectives to be achieved by all students and extension activities "for students who need an extra challenge." The state framework takes clear exception to the district's assumption that students should master essential skills as a precondition for working on more challenging tasks.

As noted earlier, the district objectives are backed by the district's testing program. But there are no obvious incentives for teachers to follow their new textbooks closely, nor are there any clear links between the objectives and the texts (e.g., coordinated textbook assignments for each objective). In this current form, district guidelines in CA-Med represent a compromise between state and district goals. Two policy initiatives--the district's objectives and tests--focus primarily on the local goal of ensuring that all high school graduates can demonstrate mastery of basic skills, while the other two initiatives--the recent mathematics textbook adoption and district inservice program--move teachers in the direction of the state's intended curriculum.

Discussion

Based on an analysis of the six districts in three states, we conclude that neither the inverse nor the direct model adequately portrays the

state-district relationship. Rather, the relationship between state and district policies is best described by the interactive model. There was a dynamic and purposeful interplay between state and district curriculum guidelines across each of the six districts and three states in our sample. In each case, district policymakers made a deliberate effort to modify the district's curriculum framework to accommodate changes in state curriculum guidelines.

Variations in styles of accommodation resulted in significant differences in the ways that state guidelines were implemented by districts. Moreover, in at least some districts, there was evidence of a compromise between what state policymakers intended and local actor needs (Fuhrman & Elmore, in press). Thus, our analyses provide clear support for the interactive model. Nevertheless, we would make one minor refinement in the portrayal of state and district policy interactions as they apply to curriculum guidelines for elementary schools.

Two Models of State and District Interaction

Our analyses suggest that districts tend to adopt one of two distinct models of accommodation to state curriculum guidelines for elementary schools. We would label these models (a) district autonomy/compromise and (b) district compliance/augmentation. Districts that adopt the district autonomy/compromise model have sufficient resources and commitment to design their own independent curriculum guidelines focusing on local needs and priorities. In this study, these districts included the two California districts and the large district in Michigan.

Backed by a clear sense of autonomy, policymakers in these districts respond to changes in state guidelines in ways that maintain the integrity of the local curriculum framework. For example, when responding to changes in

California's state-level curriculum guidelines in mathematics, policymakers in CA-Med made only minor changes in the district's instructional objectives. Similarly, the reading program in MI-Large remained basically intact despite significant change at the state-level. And, in both cases, stated goals and objectives were still touted as the core of the district's curriculum guidelines. Nevertheless, changes in the state's guidelines did elicit important accommodations across other areas of policy activity (e.g., textbook adoptions, inservice programs). In CA-Large, district policymakers selected a mathematics textbook series from the list of state-approved materials. But, they did not significantly alter the central component of the district's curriculum framework (an instructional management system that supplements and shapes teachers' use of the texts).

Districts that adopt the compliance/augmentation model generally implement state-level policies yet sometimes go beyond these recommendations with district-devised initiatives. The two districts in Florida and the medium district in Michigan provide the clearest illustration of the district compliance/augmentation model. In Florida, virtually all of the state's Minimum Student Performance Standards and Standards of Excellence were cited in the two districts' curriculum guides. Thus, there were no clear distinctions between state and district curricula in the subject areas that the state guidelines addressed. Moreover, both Florida districts focused teachers' attention on the state's intended curriculum in these subjects through other policy initiatives (e.g., local tests of state objectives).

Yet, these two districts also augmented the state's intended curriculum by designing curriculum guidelines for other subject areas. In FL-Med the district developed its own goals and objectives for the music curriculum and introduced a comprehensive "Writing to Read" program in kindergarten and first

grade, which included the process writing approach. Similarly, FL-arge created its own goals and objectives in music, art, health, social studies, science, mathematics, reading, writing, physical education, literature, and language arts. These actions augmented the state's curriculum in two ways: (a) by providing direction for teachers across a broader range of subject areas, and (b) by expanding the state's relatively limited efforts to encourage elementary school teachers to teach for understanding and thinking.

Similarly, MI-Med augmented state-level policies in art. MI-Med is using the Discipline-Based Art Education approach which emphasizes aesthetics, art criticism, art history, and art production. The Michigan Council for the Arts provides district matching funds for lectures, artist demonstrations, performances, and visual arts exhibitions which all go beyond the production of art. Over the last two years, this district has been working on a comprehensive plan to integrate art with other subject matter areas. For instance, the role of art could be included in the discussion of civilizations during social studies, in holography during mathematics, and in illustrations during literature.

In our view, the distinction between these two styles of accommodation is important for understanding and predicting the ways in which local districts respond to changes in state policy guidelines. New state initiatives are likely to yield relatively modest changes in local curriculum guidelines in those districts that conform to the district autonomy/compromise model. In contrast, new state initiatives are almost certain to result in major changes in local guidelines in districts that conform to the district compliance/augmentation model.

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